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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/273,646 03/23/1999		SHLOMO BEN-HAIM	20088-13	7390
7	590 02/13/2003			
PhilipS. Johns		EXAMINER		
Chief Patent Co		SMITH, RUTH S		
Johnson & John				
+	z Johnson Plaza k, NJ 08933-7003		ART UNIT	PAPER NUMBER
Title Branching	,	3737		
		DATE MAILED: 02/13/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

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		Applicatio	n No.	Applicant(s)	li M.			
	,	09/273,646	3	BEN-HAIM ET AL.				
<b>.</b>	Office Action Summary	Examiner		Art Unit				
		Ruth S Sm		3737				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status 1)⊠	Responsive to communication(s) filed on 21	January 200	3					
2a)⊠		his action is i						
3)□	, -			rosecution as to the	merits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
, —	Claim(s) <u>69-72 and 74-86</u> is/are pending in the 4a) Of the above claim(s) is/are withdra							
	•	34411 110111 0011	Sideration.		•			
·	5) Claim(s) is/are allowed.							
•	6)⊠ Claim(s) <u>69-72 and 74-86</u> is/are rejected. 7)□ Claim(s) is/are objected to.							
•	Claim(s) are subject to restriction and/o	or election re	auirement.					
′—	ion Papers	-, -,,-	7					
9)[	The specification is objected to by the Examine	er.						
10)	The drawing(s) filed on is/are: a)□ acce	epted or b)	objected to by the Exa	miner.				
	Applicant may not request that any objection to the	he drawing(s)	be held in abeyance. S	ee 37 CFR 1.85(a).				
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12)☐ The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).								
a) ☐ The translation of the foreign language provisional application has been received. 15)⊠ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
2) Notic	te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)			y (PTO-413) Paper No(s Patent Application (PTO				

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### Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 21, 2003 has been entered.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 69-72,74-86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Martinelli et al ('731) in view of Acker et al and Crowley ('432). Martinelli et al disclose a medical system including a catheter 20 having a distal portion 24 for applying laser energy for ablation, an ECG monitor, and position sensing means for sensing the position of the catheter distal end (see columns 7-10). One means used by Martinelli et al is magnetic means for determining the orientation of the catheter tip. Ultrasound means are used to determine tip position. Acker et al disclose the use of magnetic fields to determine both the position and orientation of a probe tip. It would have been obvious to one skilled in the art to have modified Martinelli et al such that magnetic

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fields are used to determine both position and orientation as disclosed by Acker et al. Such a modification merely involves the substitution of one known means for determining position for another and reduces the type of system parts by using the same means to perform two functions (both the function of determining position as well as orientation). It is a well known expedient in the art of ablating cardiac tissue to provide electrode means as part of the device in order to map the electrical activity of the heart prior to ablating the tissue. An example of such is taught by Crowley. Crowley also discloses superimposing the sensed electrical signals on the image representing the surface of the heart. Crowley discloses that a three dimensional image of the heart can be obtained and displayed. It would have been obvious to one skilled in the art to have further modified Martinelli et al such that the distal end of the catheter includes means for sensing the electrical signals generated by the heart and the device includes means for mapping the electrical activity of the heart using the sensed signals as taught by Crowley. The advantage of such is to enable the physician to determine where the ablation should be carried out on the heart tissue. With respect to claim 82, Crowley discloses a catheter for image and ablation in the heart that includes a means for steering the catheter to the desired location within the body. It is a well known in the art that positioning a catheter within the heart of a patient requires controlling the catheter by bending or rotating the tip of the catheter. Therefore, it would have been obvious to one skilled in the art to have further modified Martinelli et al such that it includes a means for steering the catheter within the body in order to ensure safe and accurate positioning of the catheter as is well known in the art and taught by Crowley.

# Response to Arguments

Applicant's arguments filed January 21, 2003 have been fully considered but they are not persuasive. It should be noted that the claims fail to positively set forth that the signal processor reconstructs a three-dimensional surface of the heart from the position sensor signals.

### Conclusion

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the

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grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S Smith whose telephone number is (703) 308-3063. The examiner can normally be reached on M-F 5:30 AM- 2:00 PM.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

Ruth S Smith '
Primary Examiner
Art Unit 3737

RSS February 12, 2003